

Amendments to the Claims

This listing of claims is provided here again as a courtesy:

Listing of Claims:

Claim 1 (previously presented): A method for drying a printing ink on a printing substrate in a printing press comprising the steps of :
using at least one printing ink to print on the printing substrate at a first position of a path, the printing substrate being moved along the path through the printing press; and
applying a treatment agent at a second position of the path on the printing substrate to accelerate drying of the printing ink on the printing substrate ;
the applying of the treatment agent at the second position occurring before the printing at the first position.

Claim 2 (previously presented): The drying method as recited in claim 6 wherein the printing substrate passes the first position chronologically before the second position, and the treatment agent is applied in the form of a coating.

Claim 3 (previously presented): The drying method as recited in claim 6 wherein the printing substrate passes the first position chronologically after the second position, and the treatment agent is applied in the form of a primer coating.

Claim 4 (original): The drying method as recited in claim 1 wherein the printing substrate is dried by the action of radiant energy at a chronologically later point in time from the using and applying steps at at least one third position of the path.

Claim 5 (original): The drying method as recited in claim 1 wherein the treatment agent includes a siccative or an alkaline solution, or a binding agent.

Claim 6 (previously presented): A method for drying a printing ink on a printing substrate in a printing press comprising the steps of :

using at least one printing ink to print on the printing substrate at a first position of a path, the printing substrate being moved along the path through the printing press; and
applying a treatment agent at a second position of the path on the printing substrate to accelerate drying of the printing ink on the printing substrate; and
wherein the printing substrate is dried by the action of radiant energy at a chronologically later point in time from the using and applying steps at at least one third position of the path; and
wherein at at least the third position of the path, the printing substrate is illuminated with light from a narrow-band radiant energy source, and wherein the treatment agent includes an infrared absorber with an absorption wavelength resonant to the wavelength of the light.

Claim 7 (original): The drying method as recited in claim 6 wherein the light has a wavelength of between 700 nm and 3000 nm.

Claim 8 (original): The drying method as recited in claim 6 wherein the wavelength of the light is not resonant to the absorption wavelengths of water.

Claim 9 (previously presented): A printing press comprising:
at least one print unit at a first position along a path of a printing substrate through the printing press, and
at least one drying device at a third position along the path downstream from the print unit for supplying energy to the printing substrate;
wherein at one further second position upstream from the drying device, the printing press includes a conditioning apparatus applying a treatment agent accelerating drying of the printing ink on the printing substrate at the third position; and
wherein the drying device includes at least one narrow-band radiant energy source emitting light of one wavelength in the near infrared region.

Claim 10 (original): The printing press as recited in claim 9 wherein the conditioning apparatus is designed to allow an application of the treatment agent from both sides onto the printing substrate.

Claim 11 (canceled).

Claim 12 (previously presented): The printing press as recited in claim 9 wherein the narrow-band radiant energy source is a laser light source.

Claim 13 (original): The printing press as recited in claim 12 wherein the laser light source is a semiconductor laser, a gas laser or a solid-state laser.

Claim 14 (original): The printing press as recited in claim 9 wherein the drying device has a plurality of radiant energy sources arranged in a one-dimensional field, a two-dimensional field, or a three-dimensional field, with light striking the printing substrate at a number of positions.

Claim 15 (original): The printing press as recited in claim 14 wherein the light incident to the printing substrate at one position is controllable in its intensity and exposure duration for each radiant energy source independently of the other radiant energy sources.

Claim 16 (previously presented): The printing press as recited in claim 9 wherein the drying device includes at least two radiant energy sources and the light from the at least two radiant energy sources is incident to the printing substrate at one position.